



Attorney Docket No. 108298717US  
Disclosure No. 03-0119.00/US

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/646,607-Conf. #2264
		Filing Date	August 21, 2003
		First Named Inventor	Lingyi A. Zheng
		Art Unit	1763
		Examiner Name	R. N. Kackar
Total Number of Pages in This Submission	15*	Attorney Docket Number	108298717US

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	Return Receipt Postcard Certificate of Mailing Form PTO/SB/08 Cited References (64)
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	<input type="checkbox"/> Remarks	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	PERKINS COIE LLP		
Signature			
Printed name	Paul T. Parker		
Date	3 June , 2005	Reg. No.	38,264

\* Number of pages does not include Cited References



Attorney Docket No. 108298717US  
Disclosure No. 03-0119.00/US

PTO/SB/92 (09-04)

Approved for use through 07/31/2006. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application No. 10/646,607

## Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in a box addressed to:

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on

June 6, 2005

Date

*Stephen P. Whelan*

Signature

Stephen P. Whelan

Typed or printed name of person signing Certificate

(206) 359-3209

Registration Number, if applicable

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal Form (1 page)  
Information Disclosure Statement (2 pages)  
Form PTO/SB/08 (13 pages)  
Cited References (64)  
Return Receipt Postcard



Attorney Docket No. 108298717US  
Disclosure No. 03-0119.00/US

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Zheng et al.

Application No.: 10/646,607

Confirmation No.: 2264

Filed: August 21, 2003

Art Unit: 1763

For: MICROFEATURE WORKPIECE  
PROCESSING APPARATUS AND  
METHODS FOR BATCH DEPOSITION  
OF MATERIALS ON MICROFEATURE  
WORKPIECES

Examiner: R. N. Kackar

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of the U.S. Applications and Patents listed on the PTO/SB/08 has not been provided. A copy of each Non-U.S. Patent and each Non-Patent Literature article listed on the PTO/SB/08 is attached. A full translation of the non-English language references

marked by a check mark (✓) is enclosed. An abstract is enclosed for all other non-English language references. Applicant has not verified that the translation or abstract is an accurate representation of the teachings of the non-English reference, though, and reserves the right to demonstrate otherwise.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0665, under Order No. 108298717US.

Dated: 3 June, 2005

Respectfully submitted,

By P.T.P.  
Paul T. Parker

Registration No.: 38,264  
PERKINS COIE LLP  
P.O. Box 1247  
Seattle, Washington 98111-1247  
(206) 359-8000  
(206) 359-7198 (Fax)  
Attorneys for Applicant



Attorney Docket No. 108298717US  
Disclosure No. 03-0119.00/US

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete If Known	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	1	of	13	Attorney Docket Number	108298717US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-10/767,298	Filed 01-28-2004	Zheng et al.	
		US-11/027,825	Filed 12-29-2004	Derderian et al.	
		US-10/933,604	Filed 09-02-2004	Carpenter et al.	
		US-10/839,316	Filed 05-05-2004	Saragiannis et al.	
		US-10/814,573	Filed 03-31-2004	Gealy et al.	
		US-11/043,629	Filed 01-25-2005	Rueger et al.	
		US-11/018,142	Filed 12-20-2004	Rueger et al.	
		US-10/840,571	Filed 05-06-2004	Dando et al.	
		US-10/859,883	Filed 06-02-2004	Miller et al.	
		US-10/733,523	Filed 10-10-2003	Beaman et al.	
		US-11/027,809	Filed 12-29-2004	Carpenter et al.	
		US-579,269	03-23-1897	Hent	
		US-3,618,919	11-09-1971	Beck	
		US-3,620,934	11-16-1971	Endle	
		US-3,630,881	12-28-1971	Lester et al.	
		US-3,630,769	12-28-1971	Hart et al.	
		US-3,634,212	01-11-1972	Valayll et al.	
		US-4,018,949	04-19-1977	Donokowski et al.	
		US-4,242,182	12-30-1980	Popescu	
		US-4,269,625	05-26-1981	Molenaar	
		US-4,289,061	09-15-1981	Emmett	
		US-4,397,753	08-09-1983	Czaja	

Examiner Signature	Date Considered
--------------------	-----------------

Substitute for form 1449A/B/PTO				<i>Complete If Known</i>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	2	of	13	Attorney Docket Number 108298717US	

		US-4,438,724	03-27-1984	Doehler et al.	
		US-4,469,801	09-04-1984	Hirai et al.	
		US-4,545,136	10-08-1985	Izu et al.	
		US-4,590,042	05-20-1986	Drage	
		US-4,681,777	07-21-1987	Engelken et al.	
		US-4,826,579	05-02-1989	Westfall	
		US-4,948,979	08-14-1990	Munakata et al.	
		US-4,949,669	08-21-1990	Ishii et al.	
		US-4,966,646	10-30-1990	Zdeblick	
		US-4,977,106	12-11-1990	Smith	
		US-5,076,205	12-31-1991	Vowles et al.	
		US-5,091,207	02-25-1992	Tanaka	
		US-5,131,752	07-21-1992	Yu et al.	
		US-5,136,975	08-11-1992	Bartholomew et al.	
		US-5,172,849	12-22-1992	Barten et al.	
		US-5,200,023	04-06-1993	Gifford et al.	
		US-5,223,113	06-29-1993	Kaneko et al.	
		US-5,232,749	08-03-1993	Gilton	
		US-5,248,527	09-28-1993	Uchida et al.	
		US-5,364,219	11-15-1994	Takahashi et al.	
		US-5,377,429	01-03-1995	Sandhu et al.	
		US-5,380,396	01-10-1995	Shikida et al.	
		US-5,409,129	04-25-1995	Tsukada et al.	
		US-5,418,180	05-23-1995	Brown	
		US-5,427,666	06-27-1995	Mueller et al.	
		US-5,433,835	07-18-1995	Demaray et al.	
		US-5,445,491	08-29-1995	Nakagawa et al.	
		US-5,480,818	01-02-1996	Matsumoto et al.	
		US-5,498,292	03-12-1996	Ozaki	
		US-5,500,256	03-19-1996	Watabe	
		US-5,522,934	06-04-1996	Suzuki et al.	
		US-5,536,317	07-16-1996	Crain et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO				<i>Complete If Known</i>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	3	of	13	Attorney Docket Number	108298717US
		US-5,562,800	10-08-1996	Kawamura	
		US-5,589,002	12-31-1996	Su	
		US-5,592,581	01-07-1997	Okase	
		US-5,595,606	01-21-1997	Fujikawa et al.	
		US-5,599,513	02-04-1997	Masaki et al.	
		US-5,624,498	04-29-1997	Lee et al.	
		US-5,626,936	05-06-1997	Alderman	
		US-5,640,751	06-24-1997	Faria	
		US-5,643,394	07-01-1997	Maydan et al.	
		US-5,654,589	08-05-1997	Huang et al.	
		US-5,693,288	12-02-1997	Nakamura	
		US-5,729,896	03-24-1998	Dalal et al.	
		US-5,746,434	05-05-1998	Boyd et al.	
		US-5,766,364	06-16-1998	Ishida et al.	
		US-5,769,952	06-23-1998	Komino	
		US-5,788,778	08-04-1998	Shang et al.	
		US-5,792,700	08-11-1998	Turner et al.	
		US-5,792,269	08-11-1998	Deacon et al.	
		US-5,820,641	10-13-1998	Gu et al.	
		US-5,827,370	10-27-1998	Gu	
		US-5,833,888	11-10-1998	Arya et al.	
		US-5,846,330	12-08-1998	Quirk et al.	
		US-5,846,275	12-08-1998	Lane et al.	
		US-5,851,849	12-22-1998	Comizzoli et al.	
		US-5,865,417	02-02-1999	Harris et al.	
		US-5,879,459	03-09-1999	Gadgil et al.	
		US-5,895,530	04-20-1999	Shrotriya et al.	
		US-5,908,947	06-01-1999	Vaatstra	
		US-5,932,286	08-03-1999	Beinglass et al.	
		US-5,953,634	09-14-1999	Kajita et al.	
		US-5,956,613	09-21-1999	Zhao et al.	
		US-5,968,587	10-19-1999	Frankel	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO				<i>Complete if Known</i>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	4	of	13	Attorney Docket Number	108298717US

		US-5,972,430	10-26-1999	DiMeo, Jr. et al.	
		US-5,994,181	11-30-1999	Hsieh et al.	
		US-5,997,588	12-07-1999	Goodwin et al.	
		US-6,008,086	12-28-1999	Schuegraf et al.	
		US-6,032,923	03-07-2000	Biegelsen et al.	
		US-6,042,652	03-28-2000	Hyun et al.	
		US-6,045,620	04-04-2000	Tepman et al.	
		US-6,059,885	05-09-2000	Ohashi et al.	
		US-6,062,256	05-16-2000	Miller et al.	
		US-6,070,551	06-06-2000	Li et al.	
		US-6,080,446	06-27-2000	Tobe et al.	
		US-6,079,426	06-27-2000	Subrahmanyam et al.	
		US-6,086,677	07-11-2000	Umotoy et al.	
		US-6,089,543	07-18-2000	Freerks	
		US-6,109,206	08-29-2000	Maydan et al.	
		US-09/651,037	08-30-2000	Mardian	
		US-6,123,107	09-26-2000	Selser et al.	
		US-6,129,331	10-10-2000	Henning et al.	
		US-6,139,700	10-31-2000	Kang et al.	
		US-6,143,659	11-07-2000	Leem	
		US-6,143,077	11-07-2000	Ikeda et al.	
		US-6,143,078	11-07-2000	Ishikawa et al.	
		US-6,144,060	11-07-2000	Park et al.	
		US-6,149,123	11-21-2000	Harris et al.	
		US-6,160,243	12-12-2000	Cozad	
		US-6,161,500	12-19-2000	Kopacz et al.	
		US-6,174,366	01-16-2001	Ihantola	
		US-6,174,377	01-16-2001	Doering et al.	
		US-6,174,809	01-16-2001	Kang et al.	
		US-6,173,673	01-16-2001	Golovato et al.	
		US-6,178,660	01-30-2001	Emmi et al.	
		US-6,182,603	02-02-2001	Shang et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO				<i>Complete If Known</i>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	5	of	13	Attorney Docket Number	108298717US

		US-6,192,827	02-27-2001	Welch et al.	
		US-6,194,628	02-27-2001	Pang et al.	
		US-6,193,802	02-27-2001	Pang et al.	
		US-6,197,119	03-06-2001	Dozoretz et al.	
		US-6,200,415	03-13-2001	Maraschin	
		US-6,203,613	03-20-2001	Gates et al.	
		US-6,206,972	03-27-2001	Dunham	
		US-6,211,078	04-03-2001	Matthews	
		US-6,211,033	04-03-2001	Sandhu et al.	
		US-6,210,754	04-03-2001	Lu et al.	
		US-6,214,714	04-10-2001	Wang et al.	
		US-6,237,394	05-29-2001	Harris et al.	
		US-6,237,529	05-29-2001	Spahn	
		US-6,245,192	06-12-2001	Dhindsa et al.	
		US-6,255,222	07-03-2001	Xia et al.	
		US-6,263,829	07-24-2001	Schneider et al.	
		US-2001/0010309-A1	08-02-2001	Van Bilsen	
		US-6,270,572	08-07-2001	Kim et al.	
		US-2001/0011526-A1	08-09-2001	Doering et al.	
		US-6,280,584	08-28-2001	Kumar et al.	
		US-6,287,980	09-11-2001	Hanazaki et al.	
		US-6,287,965	09-11-2001	Kang et al.	
		US-6,291,337	09-18-2001	Sidhwa	
		US-6,290,491	09-18-2001	Shahvandi et al.	
		US-2001/0024387-A1	09-27-2001	Raaijmakers et al.	
		US-6,297,539	10-02-2001	Ma et al.	
		US-6,302,964	10-16-2001	Umotoy et al.	
		US-6,302,965	10-16-2001	Umotoy et al.	
		US-6,303,953	10-16-2001	Doan et al.	
		US-2001/0029892-A1	10-18-2001	Cook et al.	
		US-6,305,314	10-23-2001	Sneh et al.	
		US-6,309,161	10-30-2001	Hofmeister	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Attorney Docket No. 10829871US  
Disclosure No. 03-0119.00/US

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
Trademark Office; U.S. DEPARTMENT OF COMMERCE  
of information, unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<i>Complete If Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
(Use as many sheets as necessary)					
Sheet	6	of	13	Attorney Docket Number	
				108298717US	

	US-6,315,859	11-13-2001	Donohoe	
	US-2001/0045187-A1	11-29-2001	Uhlenbrock	
	US-6,329,297	12-11-2001	Balish et al.	
	US-2001/0054484-A1	12-27-2001	Komino	
	US-2002/0007790-A1	01-24-2002	Park	
	US-6,342,277	01-29-2002	Sherman	
	US-6,346,477	02-12-2002	Kaloyerous et al.	
	US-6,347,602	02-19-2002	Goto et al.	
	US-6,347,918	02-19-2002	Blahnik	
	US-2002/0020353-A1	02-21-2002	Redemann et al.	
	US-6,355,561	03-12-2002	Sandhu et al.	
	US-6,358,323	03-19-2002	Schmitt et al.	
	US-2002/0043216-A1	04-18-2002	Hwang et al.	
	US-6,374,831	04-23-2002	Chandran et al.	
	US-2002/0052097-A1	05-02-2002	Park	
	US-6,387,185	05-14-2002	Doering et al.	
	US-6,387,207	05-14-2002	Janakiraman et al.	
	US-2002/0076508-A1	06-20-2002	Chiang et al.	
	US-2002/0076490-A1	06-20-2002	Chiang et al.	
	US-2002/0073924-A1	06-20-2002	Chiang et al.	
	US-2002/0076507-A1	06-20-2002	Chiang et al.	
	US-6,420,230	07-16-2002	Derderian et al.	
	US-6,419,462	07-16-2002	Horie et al.	
	US-6,420,742	07-16-2002	Ahn et al.	
	US-2002/0094689-A1	07-18-2002	Park	
	US-2002/0100418-A1	08-01-2002	Sandhu et al.	
	US-6,428,859	08-06-2002	Chiang et al.	
	US-2002/0104481-A1	08-08-2002	Chiang et al.	
	US-6,432,831	08-13-2002	Dhindsa et al.	
	US-6,432,259	08-13-2002	Noorbaksh et al.	
	US-6,432,256	08-13-2002	Raoux	
	US-2002/0110991-A1	08-15-2002	Li	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Substitute for form 1449A/B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete If Known				
	Application Number	10/646,607-Conf. #2264		
	Filing Date	August 21, 2003		
	First Named Inventor	Lingyi A. Zheng		
	Art Unit	1763		
	Examiner Name	Ram N. Kackar		
Sheet	7	of	13	
			Attorney Docket Number	108298717US

	US-2002/0108714-A1	08-15-2002	Doering et al.	
	US-6,435,865	08-20-2002	Tseng et al.	
	US-6,444,039	09-03-2002	Nguyen	
	US-2002/0127745-A1	09-12-2002	Lu et al.	
	US-6,450,117	09-17-2002	Murugesh et al.	
	US-6,451,119	09-17-2002	Sneh et al.	
	US-2002/0129768-A1	09-19-2002	Carpenter et al.	
	US-6,458,416	10-01-2002	Derderian et al.	
	US-6,461,931	10-08-2002	Eldridge	
	US-6,461,436	10-08-2002	Campbell et al.	
	US-2002/0144655-A1	10-10-2002	Chiang et al.	
	US-2002/0146512-A1	10-10-2002	Rossman	
	US-2002/0164420-A1	11-07-2002	Derderian et al.	
	US-2002/0162506-A1	11-07-2002	Sneh et al.	
	US-2002/0185067-A1	12-12-2002	Upaham	
	US-2002/0195201-A1	12-26-2002	Beer	
	US-2002/0197402-A1	12-26-2002	Chiang et al.	
	US-2002/0195056-A1	12-26-2002	Sandhu et al.	
	US-2003/0003730-A1	01-02-2003	Li	
	US-2003/0000473-A1	01-02-2003	Chae et al.	
	US-2003/0003697-A1	01-02-2003	Agarwal et al.	
	US-6,503,330	01-07-2003	Sneh et al.	
	US-6,506,254	01-14-2003	Bosch et al.	
	US-2003/0013320-A1	01-16-2003	Kim et al.	
	US-6,509,280	01-21-2003	Choi	
	US-2003/0023338-A1	01-30-2003	Chin et al.	
	US-2003/0024477-A1	02-06-2003	Okuda et al.	
	US-2003/0027428-A1	02-06-2003	Ng et al.	
	US-2003/0027431-A1	02-06-2003	Sneh et al.	
	US-10/365,085	02-11-2003	Carpenter et al.	
	US-2003/0037729-A1	02-27-2003	DeDontney et al.	
	US-6,534,395	03-18-2003	Werkhoven et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
	Application Number	10/646,607-Conf. #2264		
	Filing Date	August 21, 2003		
	First Named Inventor	Lingyi A. Zheng		
	Art Unit	1763		
	Examiner Name	Ram N. Kackar		
Sheet	8	of	13	
			Attorney Docket Number	108298717US

	US-6,534,007	03-18-2003	Blonigan et al.	
	US-2003/0060030-A1	03-27-2003	Lee et al.	
	US-6,540,838	04-01-2003	Sneh et al.	
	US-6,541,353	04-01-2003	Sandhu et al.	
	US-2003/0066483-A1	04-10-2003	Lee et al.	
	US-2003/0070618-A1	04-17-2003	Campbell et al.	
	US-2003/0070617-A1	04-17-2003	Kim et al.	
	US-2003/0070609-A1	04-17-2003	Campbell et al.	
	US-6,551,929	04-22-2003	Kori et al.	
	US-2003/0075273-A1	04-24-2003	Kilpela et al.	
	US-2003/0079686-A1	05-01-2003	Chen et al.	
	US-6,562,140	05-13-2003	Bondestam et al.	
	US-6,562,141	05-13-2003	Clarke	
	US-2003/0098372-A1	05-29-2003	Kim	
	US-2003/0098419-A1	05-29-2003	Ji et al.	
	US-6,573,184	06-03-2003	Park	
	US-2003/0106490-A1	06-12-2003	Jallepally et al.	
	US-6,579,372	06-17-2003	Park	
	US-6,579,374	06-17-2003	Bondestam et al.	
	US-2003/0121608-A1	07-03-2003	Chen et al.	
	US-6,596,085	07-22-2003	Schmitt et al.	
	US-6,602,346	08-05-2003	Gochberg	
	US-2003/0159780-A1	08-28-2003	Carpenter et al.	
	US-10/665,908	09-18-2003	Sarigiannis et al.	
	US-6,630,201	10-07-2003	Chiang et al.	
	US-2003/0194862-A1	10-16-2003	Mardian et al.	
	US-2003/0192645-A1	10-16-2003	Liu	
	US-6,635,965	10-21-2003	Lee et al.	
	US-6,638,879	10-28-2003	Hsieh et al.	
	US-6,638,672	10-28-2003	Deguchi	
	US-2003/0203109-A1	10-30-2003	Dando et al.	
	US-2003/0200926-A1	10-30-2003	Dando et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO				<i>Complete if Known</i>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	9	of	13	Attorney Docket Number	108298717US

		US-6,641,673	11-04-2003	Yang	
		US-6,673,196	01-06-2004	Oyabu	
		US-2004/0003777-A1	01-08-2004	Carpenter et al.	
		US-2004/0007188-A1	01-15-2004	Burkhart et al.	
		US-2004/0035358-A1	02-26-2004	Basceri et al.	
		US-2004/0040502-A1	03-04-2004	Basceri et al.	
		US-2004/0040503-A1	03-04-2004	Basceri et al.	
		US-6,704,913	03-09-2004	Rossman	
		US-6,706,334	03-16-2004	Kobayashi et al.	
		US-6,705,345	03-16-2004	Bifano	
		US-2004/0083959-A1	05-06-2004	Carpernter et al.	
		US-2004/0083961-A1	05-06-2004	Basceri	
		US-2004/0083960-A1	05-06-2004	Dando	
		US-2004/0099377-A1	05-27-2004	Newton et al.	
		US-2004/0124131-A1	07-01-2004	Aitchison et al.	
		US-2004/0154538-A1	08-12-2004	Carpenter et al.	
		US-6,818,249-B2	11-16-2004	Derderian	
		US-2004/0226507-A1	11-18-2004	Carpenter et al.	
		US-6,821,347-B2	11-23-2004	Carpenter et al.	
		US-6,838,114-B2	01-04-2005	Carpenter et al.	
		US-2005/0016984-A1	01-27-2005	Dando	
		US-2005/0022739-A1	02-03-2005	Carpenter et al.	
		US-2005/0028734-A1	02-10-2005	Carpenter et al.	
		US-2005/0039680-A1	02-24-2005	Beaman et al.	
		US-2005/0039686-A1	02-24-2005	Zheng et al.	
		US-6,861,094-B2	03-01-2005	Derderian et al.	
		US-2005/0045100-A1	03-03-2005	Derderian	
		US-2005/0059261-A1	03-17-2005	Basceri et al.	
		US-2005/0081786-A1	04-21-2005	Kubista et al.	
		US-2005-0087130-A1	04-28-2005	Derderian	
		US-2005-0087302-A1	04-28-2005	Mardian	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	10	of	13	Attorney Docket Number	108298717US

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
		JP-4-213818-A	08-04-1992	Sony Corp	
		JP-2001-82682-A	03-30-2001	Matsushita Refrig Co Ltd.	✓
		JP-1-273991-A	11-01-1989	Ishikawajima Harima Heavy Ind. Co. Ltd.	
		JP-63-256460-A	10-24-1988	Oki Electric Ind. Co. Ltd.	
		WO-00/79019-A1	12-28-2000	Gadgil	
		WO-03/016587-A1	02-27-2003	ASM Microchemistry OY, et al.	
		WO-00/65649-A1	11-02-2000	Tokyo Electron Limited	
		WO-03/008662-A2	01-30-2003	Applied Materials, Inc.	
		WO-03/028069-A2	04-03-2003	Applied Materials, Inc.	
		WO-02/095807-A2	11-28-2002	Integrated Materials, Inc.	
		WO-02/073660-A2	09-19-2002	ASML US, Inc.	
		WO-00/63952-A1	10-26-2000	Integrated Materials, Inc.	
		WO-03/033762-A1	04-24-2003	Micron Technology, Inc.	
		WO-02/45871-A1	06-13-2002	Angstrom Systems Inc.	
		DE-198 51 824-A1	05-11-2000	Siemens AG	
		WO-03/052807-A1	06-26-2003	Tokyo Electron Limited	
		JP-9-82650-A	03-28-1997	Kokusai Electric Co. Ltd.	
		JP-10-223719-A	08-21-1998	Dainippon Screen Mfg. Co. Ltd.	
		JP-4-100533-A	04-02-1992	Mitsubishi Electric Corp.	
		SU-598630	03-25-1978	Veremeichuk	
		JP-2002-164336-A	06-07-2002	Sony Corporation	✓
		WO-02/073329-A2	09-19-2002	Applied Materials, Inc.	
		WO-03/035927-A2	05-01-2003	Applied Materials, Inc.	
		WO-01/46490-A1	06-28-2001	Lam Research Corporation	
		WO-98/37258-A1	08-27-1998	Moore Epitaxial Inc.	
		WO-02/081771-A2	10-17-2002	Angstrom Systems, Inc.	
		WO-99/06610-A1	02-11-1999	Applied Komatsu Technology, Inc.	

Examiner Signature	Date Considered
--------------------	-----------------

Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	11	of	13	Attorney Docket Number 108298717US	

	WO-02/48427-A1	06-20-2002	Tokyo Electron Limited		
	EP-1 167 569-A1	01-02-2002	IPS Limited		
	WO-00/40772-A1	07-13-2000	Genus, Inc.		
	JP-11-172438-A	06-29-1999	Samsung Electron Co. Ltd.		✓
	JP-8-34678-A	02-06-1996	Matsushita Electric Works Ltd.		✓
	JP-6-151558-A	05-31-1994	Tokyo Electron Ltd.		✓
	JP-6-342785-A	12-13-1994	Fujitsu Ltd.		✓
	JP-2001-261375-A	09-26-2001	Toshiba Ceramics Co. Ltd.		✓
	JP-2001-254181-A	09-18-2002	Tokyo Electron Ltd.		✓

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
		Integrated Process Systems Ltd., "ALD & CVD", 2 pages, retrieved from the Internet on December 11, 2001, < <a href="http://www.ips-tech.com/eng/pro-p2-2.htm">http://www.ips-tech.com/eng/pro-p2-2.htm</a> >.			
		Deublin Company, "Rotating Unions", 1 page, retrieved from the Internet on February 4, 2002, < <a href="http://www.com/products/rotatingunions.htm">http://www.com/products/rotatingunions.htm</a> >.			
		CAMERON, I., "Atomic Layer Deposition Chamber Works at Low Temperatures", 2 pages, Electronic Times, July 19, 2001, < <a href="http://www.electronicstimes.com/story/OEG20010719S0042">http://www.electronicstimes.com/story/OEG20010719S0042</a> >.			
		Cutting Edge Optronics, 600W QCW Laser Diode Array, Part Number: ARR48P600, 2 pages, October 2001, < <a href="http://www.ceolaser.com">www.ceolaser.com</a> >.			
		HENNING, A.K., et al., "Microfluidic MEMS for Semiconductor Processing," IEEE Trans. Components, Packaging, and Manufacturing Technology B21, pp. 329-337, 1998.			
		FITCH, J.S., et al., "Pressure-Based Mass-Flow Control Using Thermopneumatically-Actuated Microvalves," Proceedings, Sensors and Actuators Workshop, pp. 162-165 (Transducers Research Foundation, Cleveland, OH, 1998).			
		HENNING, A.K., "Liquid and gas-liquid phase behavior in thermopneumatically actuated microvalves," Proceedings, Micro Fluidic Devices and Systems (SPIE, Bellingham, WA, 1998; A.B. Frazier and C.H. Ahn, eds.), Vol. 3515, pp. 53-63.			

Examiner Signature	Date Considered
--------------------	-----------------

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	12	of	13	Attorney Docket Number	108298717US

	HENNING, A.K., et al., "Performance of MEMS-Based Gas Distribution and Control Systems for Semiconductor Processing", 8 pages, Proceedings, SEMICON West Workshop on Gas Distribution (SEMI, Mountain View, CA, 1998).	
	MAILLEFER, D., et al., "A High-Performance Silicon Micropump for Disposable Drug Delivery Systems," pp. 413-417, IEEE, 2001.	
	HENNING, A.K., et al., "A thermopneumatically actuated microvalve for liquid expansion and proportional control", Proceedings, TRANSDUCERS '97: 1997 International Solid State Sensors and Actuators Conference, pp. 825-828.	
	University of California, Berkeley, University Extension, "Atomic Layer Deposition," 5 pages, September 24-25, 2001, < <a href="http://www.unex.berkeley.edu/eng/br225/1-1.html">http://www.unex.berkeley.edu/eng/br225/1-1.html</a> >.	
	ENGELKE, F., et al., "Determination of Phenylthiohydantoin-Amino Acids by Two-Step Laser Sesorption/Multiphoton Ionization," Analytical Chemistry, Vol. 59, No. 6, pp. 909-912, March 15, 1987, The American Chemical Society.	
	COWIN, J.P., et al., "Measurement of Fast Desorption Kinetics of D2 From Tungsten By Laser Induced Thermal Desorption," Surface Science, Vol. 78, pp. 545-564, 1978, North-Holland Publishing Company.	
	READY, J.F., "Effects Due to Absorption of Laser Radiation," Journal of Applied Physics, Vol. 36, No. 2, pp. 462-468, February 1965, Journal of Applied Physics, American Institute of Physics.	
	ZARE, R.N., et al. "Mass Spectrometry of Molecular Adsorbates Using Laser Desorption/Laser Multiphoton Ionization," Bulletin of the Chemical Society of Japan, Vol. 61, No. 1, pp. 87-92, January 1988.	
	Tokyo Electron Limited, Plasma Process System, Trias SPA, 1 page, retrieved from the Internet on October 16, 2004, < <a href="http://www.tel.com/eng/products/spe/sdriasspa.htm">http://www.tel.com/eng/products/spe/sdriasspa.htm</a> >.	
	OLSSON, A., "Valve-less Diffuser Micropumps", ISSN 0281-2878, 66 pages, 1998.	
	BARDELL, R.L., et al., "Designing High-Performance Micro-Pumps Based on No-Moving-Parts Valves", DSC-Vol. 62/HTD-Vol. 354, Microelectromechanical Systems (MEMS) ASME 1997, pp. 47-53.	
	HENNING, A.K., et al., "Performance of MEMS-Based Gas Distribution and Control Systems for Semiconductor Processing," Proceedings, Micromachined Devices and Components (SPIE, Bellingham, WA, 1998; P.J. French and K. Chau, eds.), Vol. 3514, pp. 159-170.	
	HENNING, A.K. et al., "Contamination Reduction Using MEMS-BASED, High-Precision Mass Flow Controllers," Proceedings, SEMICON West Symposium on Contamination Free Manufacturing for Semiconductor Processing (SEMI, Mountain View, CA, 1998), pp. 1-11.	
	HENNING, A.K., "Microfluidic MEMS," Proceedings, IEEE Aerospace Conference, Paper 4.906 (IEEE Press, Piscataway, NJ, 1998), 16 pages.	

Examiner Signature	Date Considered
--------------------	-----------------

Attorney Docket No. 108298717US  
Disclosure No. 03-0119.00/US

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	10/646,607-Conf. #2264
				Filing Date	August 21, 2003
				First Named Inventor	Lingyi A. Zheng
				Art Unit	1763
				Examiner Name	Ram N. Kackar
Sheet	13	of	13	Attorney Docket Number	108298717US

	PETERS, L., "Thermal Processing's Tool of Choice: Single-Wafer RTP or Fast Ramp Batch?" Semiconductor International, April 1, 1998, 8 pages, < <a href="http://www.e-incite.net/semiconductor/index.asp?alayout+article&amp;articleid=CA163937">http://www.e-incite.net/semiconductor/index.asp?alayout+article&amp;articleid=CA163937</a> >.	
	The University of Adelaide, Australia, Department of Chemistry, "Spectroscopy", 2 pages, retrieved from the Internet on February 9, 2002, < <a href="http://www.chemistry.adelaide.edu.au/external/Soc-Rel/Content/spectros.htm">http://www.chemistry.adelaide.edu.au/external/Soc-Rel/Content/spectros.htm</a> >.	
	Deublin Company, "Sealing," 2 pages, retrieved from the Internet on February 4, 2002, < <a href="http://www.deublin.com/products/sealing.htm">http://www.deublin.com/products/sealing.htm</a> >.	
	Deublin Company, "Precision Rotating Connections for Water, Steam, Air, Hydraulic, Vacuum, Coolant and Hot Oil Service," 1 page, retrieved from the Internet on February 4, 2002, < <a href="http://www.deublin.com">http://www.deublin.com</a> >.	
	Integrated Process Systems Ltd., "Nano-ALD", 2 pages, retrieved from the Internet on December 11, 2001, < <a href="http://www.ips-tech.com/eng/pro-p2.htm">http://www.ips-tech.com/eng/pro-p2.htm</a> >.	
	Integrated Process Systems Ltd., "Welcome to IPS Ltd.", 1 page, retrieved from the Internet on December 11, 2001, < <a href="http://www.ips-tech.com/eng/main.htm">http://www.ips-tech.com/eng/main.htm</a> >.	
	TAKAHASHI, K et al., "Process Integration of 3D Chip Stack with Vertical Interconnection," pp. 601-609, 2004 Electronic Components and Technology Conference, IEEE, June 2004.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	Date Considered
--------------------	-----------------